

## **ESR and spin-lattice relaxation of Nd<sup>3+</sup> in silicates of various structures**

Kurkin I., Chernov K.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### **Abstract**

ESR studies have been made on Nd<sup>3+</sup> in certain orthosilicate and pyrosilicate single crystals. It is found that Nd<sup>3+</sup> ions produce a type of activator center, and the principal values of the chief factors have been measured. The ESR spectra are compared with structural data on the crystals. The spin-lattice relaxation gives the positions of the nearest excited Stark level of Nd<sup>3+</sup> in the silicates. © 1983 Plenum Publishing Corporation.

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